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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,037	08/29/2003	John Chungteh Pan	4299-0105P	8521
2292	7590	06/14/2005		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER WARD, JOHN A	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

10/651,037

Applicant(s)

PAN ET AL.

Examiner

John A. Ward

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helling et al (US 4,751,434) in view of Deloy (US 6,336,728).

Regarding claim 1, Helling et al discloses a self-illuminating sealed cool light display having a to elongated lamps 15, 17 which is substantially bent into a s-shape (figure 1), figure 1 also shows the lamps mounted side by side inside a frame 50 and substantially parallel to each other.

Regarding claim 5, Helling et al shows in figure 1 that the lamps are being placed side by side in a symmetrical mirror image fashion.

Regarding claim 7, Helling et al shows an inverter 19 and 21 providing each lamp with AC electricity.

Regarding claim 8, it would be inherent for the lamps to have electrode in order for power to be supplied to the lamps.

Regarding claims 1 and 9, Helling et al does not teach or suggest the lamps being having interval pitches being substantially equal, a pitch between adjacent straight portions of adjacent lamps being substantially equal to the interval pitches.

Regarding claim 1, Deloy ('726) shows a flat panel display light guide having a plurality of S-shape lamps having three straight portions (figure 1A) and interval pitches between the straight portions of the lamps being substantially equal, a pitch between adjacent straight portions of adjacent lamps being substantially equal to the interval pitches.

Regarding claim 9, Deloy shows that a straight portion of the lamp fail to interlace with the straight portion of the other of the elongated lamp in figure 1B.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the cool light display of Helling et al with the display light of Deloy in order to provide a means of a high performance luminare for a flat panel display or LCD as taught by Deloy (column 1, lines 10-53).

Claims 1, 6 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duijneveldt (US 5,971,567) in view of Deloy ('728).

Regarding claims 1 and 7, Van Duijneveldt shows a backlight luminaire having a two elongated lamps 24, 25, each bent into a substantial S-shape having at least three

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straight portions (figure 3A), figure 3B shows that the lamps are located in a frame 26, and an voltage inverter 28, 29 powering the lamps.

Regarding claim 6, Van Duijneveldt shows in figure 3A that the lamps are being placed side by side in a parallel replica fashion.

Regarding claim 8, it would be inherent for the lamps to have electrode in order for power to be supplied to the lamps.

Regarding claims 1 and 9, Duijneveldt does not teach or suggest the lamps being having interval pitches being substantially equal, a pitch between adjacent straight portions of adjacent lamps being substantially equal to the interval pitches.

Regarding claim 1, Deloy ('726) shows a flat panel display light guide having a plurality of S-shape lamps having three straight portions (figure 1A) and interval pitches between the straight portions of the lamps being substantially equal, a pitch between adjacent straight portions of adjacent lamps being substantially equal to the interval pitches.

Regarding claim 9, Deloy shows that a straight portion of the lamp fail to interlace with the straight portion of the other of the elongated lamp in figure 1B

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the cool light display of Helling et al with the display light of Deloy in order to provide a means of a high performance luminare for a flat panel display or LCD as taught by Deloy (column 1, lines 10-53).

Claims 2, 3 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Van Duijneveldt ('567) in view of Deloy ('728).

Van Duijneveldt discloses all the limitations of the claimed invention as cited above including a first and second elongated lamp in an s-shape and frame, but Van Duijneveldt does disclose the lengths of the lamps or the luminance of the lamps as cited in the above mention claims.

It would have been obvious to one having ordinary skill in the art at the time the invention was made make the lamps the sizes and luminance as cited in the claims, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Ward whose telephone number is 571-272-2386. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAW  
June 8, 2005



**JOHN ANTHONY WARD**  
**PRIMARY EXAMINER**